

Global Precipitation Measurement Mission

GPM.NASA.GOV / EDUCATION

TWITTER.COM / NASA_RAIN

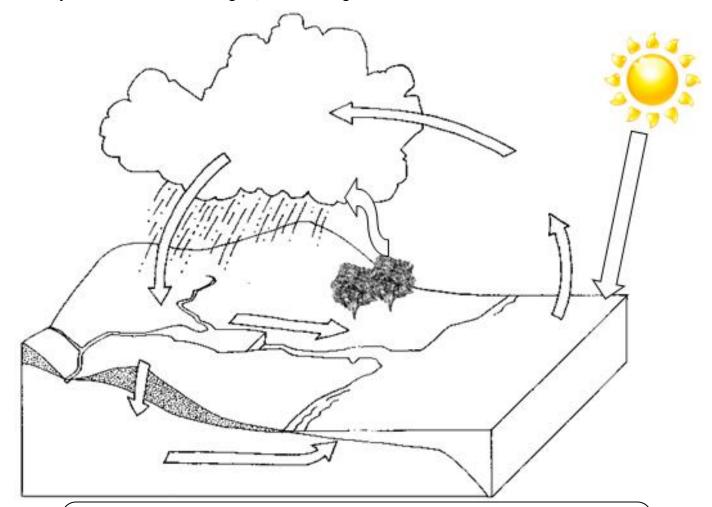
ACEBOOK.COM / NASA.RAIN

Water Falls – Pre-Visit Lesson – Student Capture Sheet

Name	Date	Period
------	------	--------

Warm-up/Activator: What percentage of Earth's surface do you think is covered in water?

- 1. What percentage of ALL water on Earth do you think is readily available for humans to use? _____
- 2. What percentage of Earth's water is <u>actually</u> available to humans?
- 3. Watch the animation of the water cycle. Observe how water is changing phases and moving.
- 4. As you watch the animation again, label the diagram below.



Which stages in the water cycle are driven by solar radiation? (Require heat energy)



Global Precipitation Measurement Mission

GPM.NASA.GOV / EDUCATION

TWITTER.COM / NASA RAIN

FACEBOOK.COM / NASA.RAIN

Which stages in the water cycle are driven by gravity?

Where is water being stored? (reservoirs)

For this mini-project, you will describe the movement of a water drop through the water cycle. The drop may begin anywhere in the cycle and must go through at least two phase changes, (i.e. liquid to gas and back to liquid or solid). You must also include how gravity and the sun's radiation drive the cycle.

You have 2 options for this project:

- 1. You may make a comic strip with a molecule of water as the main character.
 - a. The comic must include text that explains what is happening in each frame.
 - b. The text can be dialog 'spoken' by the drop, or written as captions at the bottom of the frames.
- 2. You may make a mini-poster with a diagram of the water cycle. (8.5" X 11" maximum)
 - a. The diagram should not look just like the one we used in class. It should have the drop moving from one step to another.
 - b. Each step in the cycle needs to have text that describes what is happening to the drop. This text can be 'spoken' by the drop, or written as a caption near the drop.

Electronic Options for those who prefer to use a computer:

- A Glogster poster.
- Computer generated comic strip.
- Idea of your choice. This MUST be approved in advance.



Global Precipitation Measurement Mission

GPM.NASA.GOV / EDUCATION

TWITTER.COM / NASA RAIN

FACEBOOK.COM / NASA.RAIN

MINI-PROJECT RUBRIC

Water Cycle Mini-Project					
	4	3	2	1	
Concept Understanding	The student demonstrated a full understanding of how a water molecule can move through the water cycle. Student included the role of the sun and gravity.	The student demonstrated a good understanding of how a water molecule can move through the water cycle. Student included the role of the sun and gravity.	The student demonstrated some understanding of how a water molecule can move through the water cycle. Student included the role of the sun and/or gravity.	The student demonstrated little understanding of how a water molecule can move through the water cycle. Student did not include the role of the sun or gravity.	
Proper Use of Terminology	The student properly used all the key terms associated with the water cycle.	The student properly used most of the key terms associated with the water cycle.	The student properly used some key terms associated with the water cycle.	The student properly used two or fewer key terms associated with the water cycle.	
Writing Skills	The student fully communicated the concepts in the water cycle with few grammar and/or spelling errors.	The student communicated well the concepts in the water cycle with few grammar and/or spelling errors.	The student somewhat communicated the concepts in the water cycle with many grammar and/or spelling errors.	The student poorly communicated the concepts in the water cycle with many grammar and/or spelling errors.	
Neatness and Legibility	All of the following are true: The project is neat. All writing is legible. The sequence is easily followed. The project is colorful.	Three of the following are true: The project is neat. All writing is legible. The sequence is easily followed. The project is colorful.	Two of the following are true: The project is neat. All writing is legible. The sequence is easily followed. The project is colorful.	One of the following is true: The project is neat. All writing is legible. The sequence is easily followed. The project is colorful.	

Total Score: _____